

Remarks / Arguments

Claims 1-4, 6, 7, 9-11, 14, 16 and 17 are pending in this application. Claims 5, 8 and 13 have been canceled. Claims 1, 2, 3, 7, 9-11, 16 and 17 have been amended. No new matter has been added.

I. Election/Restrictions

Restriction was required under 35 U.S.C. §§ 121 and 372. During a telephone conversation on 03/05/03, applicant without traverse provisionally elected the invention of Restriction Group I, namely compounds of the present invention wherein A and B are phenyl and D is carbonyl, and the species of working example 2, namely (+)-2-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl]-4-(4'-ethoxy[1,1'-biphenyl]-4-yl)-4-oxobutanoic acid. This election is hereby affirmed. Claims 1 and 2 have accordingly been amended to be directed only to elected subject matter. No claims are withdrawn as being directed to unelected subject matter. Applicant reserves the right to prosecute the unelected subject matter in a continuing application.

Claims 1-4, 6, 7, 9, 10, 14, 16 and 17 read on the elected species (example 2).

II. Information Disclosure Statement

The Examiner has stated that he has considered the Information Disclosure Statements submitted 06/29/01 and 06/17/02, but requested the applicants to disclose and provide any art related to WO 96/15096 either of corresponding U.S. or foreign applications. In a telephone interview held on November 4, 2003, the requested a listing of pending U.S. applications and issued U.S. patents from the patent family of WO 96/15096 in order to consider possible obviousness-type double patenting. An Information Disclosure Statement listing all issued U.S.

patents from the patent family of WO 96/15096 is enclosed with this response. There are no pending U.S. applications from this family.

III. Claim Rejections - 35 U.S.C. § 102(b)

Claims 1-11, 13, 14, 16 and 17 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kluender et al. (WO 96/15096). The Examiner states that the '096 reference discloses making derivatives of substituted 4-biarylbutaric or 5-biarylpentanoic acids of the generalized formula (T)_xA-B-D-E-G and their use as MMP inhibitors as claimed in the present application.

Claims 5, 8, and 13 have been canceled. (Claims 12 and 15 were canceled previously in the preliminary amendment.). Thus, the rejection under §102(b) now applies to claims 1-4, 6-7, 9-11, 14, 16, and 17.

Kluender et al. '096 discloses derivatives of substituted 4-biarylbutaric or 5-biarylpentanoic acids and their use as MMP-inhibitors for a number of specified disease states (see e.g. page 10 to 11, bridging paragraph or claim 18). However, the '096 reference does not disclose the use of the such compounds in treating a respiratory disease, as presently claimed in claims 1-4, 6, 9-11, 14, and 17.

Claim 7 is directed to compounds, and claim 16 is directed to a pharmaceutical composition comprising a compound of claim 7. Applicants have amended claim 7 to delete the following compounds:

(+)-2-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl]-4-(4'-ethoxy[1,1'-biphenyl]-4-yl)-4-oxobutanoic acid (row 2 of the table)

(-)-2-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl]-4-(4'-ethoxy[1,1'-biphenyl]-4-yl)-4-oxobutanoic acid (row 3 of the table)

(+)-2-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl]-4-(4'-bromo[1,1'-biphenyl]-4-yl)-4-oxobutanoic acid (row 7 of the table)

(-)-2-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl]-4-(4'-bromo[1,1'-biphenyl]-4-yl)-4-oxobutanoic acid (row 8 of the table)

(+)-2-[2-(5,7-dioxo-5,7-dihydro-6H-[1,3]-dioxolo-[4,5-f]-isoindol-6-yl)ethyl]-4-(4'-chloro[1,1'-biphenyl]-4-yl)-4-oxobutanoic acid (row 9 of the table)

(-)-2-[2-(5,7-dioxo-5,7-dihydro-6H-[1,3]-dioxolo-[4,5-f]-isoindol-6-yl)ethyl]-4-(4'-chloro[1,1'-biphenyl]-4-yl)-4-oxobutanoic acid (row 10 of the table).

Claim 7 as presently amended is not anticipated by Kluender et al (WO 96/15096). Claim 16, which employs a compound of claim 7, is therefore also not anticipated.

Since Kluender et al. '059 does not teach or suggest all of the elements of the present claims, the rejection of claims 1-4, 6-7, 9-11 and 14 is unsupported and should be withdrawn.

Claim 16 is directed to a pharmaceutical composition comprising a compound of claim 7. As claim 7 is not anticipated by the '096 reference and should therefore be allowable, claim 16 should also be allowable.

Claim 17 is directed to a method of treating acute and chronic inflammatory processes, comprising administering to a mammal an effective amount of a compound according to claim 7. As claim 7 is considered to be allowable, claim 17 should also be allowable.

Claims 16 and 17 referred to claim 8 (now canceled) and have accordingly been amended to delete the reference to claim 8.

IV. Claim Rejections - 35 U.S.C. § 112 second paragraph

Claims 1-11, 13, 14, 16 and 17 were rejected under 35 U.S.C. §112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as invention.

(A) and (B) Claims 1 and 2 have been rejected as being indefinite for reciting "**and** pharmaceutically acceptable salts **and** prodrugs thereof". Additionally, claims 1 and 2 have been rejected as being indefinite for reciting " prodrugs". Claims 1 and 2 have been amended to recite "or a pharmaceutically acceptable salt thereof", thus overcoming the rejections (A) and (B) under 35 U.S.C. § 112 second paragraph.

For the reason given under (A) applicant also amended claim 9 to cite "or its salt" instead of "and their salts".

(C) Claims 6-11 have been rejected as being indefinite for identifying compounds in various ways, by reciting different nomenclatures for the chain portion of the molecule " $\text{--C(O)CH}_2\text{--CH(COOH)--CH}_2\text{--CH}_2\text{--}$ " (claims 7-11) or using chemical structures only (claim 6, which is dependent on claims 1 and 2, wherein the chain portion of the molecule is defined in words rather than chemical structures). The Examiner maintains that it is not clear what Applicant exactly wants to present with claims 6-11. Claim 8 has been canceled, overcoming the rejection of claim 8. Applicant submits that the language employed in claims 6, 7 and 9-11 is correct, and that despite the variations in nomenclature, these claims unambiguously disclose and are directed to different embodiments of the present invention. The different nomenclature employed in claims 7 and 9 ($\text{CO--E--CO}_2\text{H}$ represents a 3-carboxyl-5- R^7 -pentan-1-on-1-yl-residue) and claims 10 and 11 (compounds named as a substituted 2-ethyl-4-oxobutanoic acid) is due to the fact that in claims 7 and 9 said " $\text{--C(O)CH}_2\text{--CH(COOH)--CH}_2\text{--CH}_2\text{--}$ " is named according to the nomenclature for an isolated substituent, while in claims 10 and 11 it is named as part of the complete molecule. The person skilled in the art can however in both cases

unambiguously determine the structure from the name. Claim 6 does not give the name, but, by showing the structure, enables the person skilled in the art to unambiguously determine the claimed compounds. Applicant thus submits that claims 6, 7 and 9-11 are clear and definite.

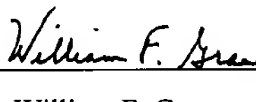
(D) Claim 8 was rejected as being indefinite for having no period at the end. Applicant has canceled claim 8.

V. Claim Rejections - 35 U.S.C. § 112 first paragraph

Claims 1-6, 9-11, 13, 14 and 17 have been rejected under 35 U.S.C. §112 first paragraph, on the ground that the specification does not reasonably provide enablement for "prevention". Claims 1, 9, 10, 11 and 17 have been amended to delete the phrase "or preventing". Claim 13 has been cancelled. Claims 2-6 are dependent on allowable base claim 1 and should therefore also be allowable. Claim 14 is dependent on allowable base claims 1, 9, 10 and 11 and should therefore also be allowable.

In view of the above amendments and arguments, this application is deemed to be in condition for allowance, and allowance is accordingly requested.

Respectfully submitted,



William F. Gray

Bayer Pharmaceuticals Corporation

400 Morgan Lane

West Haven, CT 06516-4175

Reg. No.: 31018

Phone: (203) 812-2712

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